

Server Side Flow

/* @resourceallocator_2 is invoked each time for each RPC

*** from any client. Therefore, a thread is created**

*** to services this request,**

***/**

Function: resourceallocator_2

```
void * resourceallocator_2(void *data)
{
    ....
    pthread_create(&p_thread[id],&attr[id],serv_request,(void *)data_ptr);
}
```

Function: serv_request

```
void * serv_request(void *data)
{
    ....
    case allocate:
        local = (bool_t *) (char *, void *, struct svc_req *)allocat
        break;
}
```

Function: allocate_2_svc

```
void * allocate_2_svc(void *data)
{
    ....
    /*Block: num_requestedResource < num_PrivateResources*/
    while (argp->req > rsrc_pvt);
    /* [Allocation]: Update the resources number */
    pthread_mutex_lock(&lock);
    rsrc_pvt-=argp->req;
    pthread_mutex_unlock(&lock);
    * Do Dummy Work for a random duration up to 3 secs*/
    work=rand()%4;
    sleep(work);
    result->rep = 2*(argp->req);
    /*[DeAllocation]: Update the resources number */
    pthread_mutex_lock(&lock);
    rsrc_pvt+=argp->req;
    pthread_mutex_unlock(&lock);
}
```

e_2_svc;